

Title (en)  
WIND POWER GENERATING SYSTEM

Title (de)  
SYSTEM ZUR ERZEUGUNG VON WINDENERGIE

Title (fr)  
SYSTÈME DE PRODUCTION D'ÉNERGIE ÉOLIENNE

Publication  
**EP 2806159 A1 20141126 (EN)**

Application  
**EP 12866000 A 20120118**

Priority  
JP 2012000248 W 20120118

Abstract (en)  
An object of the present invention is to provide a Wind Turbine Generation System that eliminates the necessity of switching to a circuit different from the one used during a normal power generation operation even when Power grid voltage sags. To accomplish the above object, the Wind Turbine Generation System according to the present invention includes a wind turbine having blades rotating upon receipt of wind, a rotor connected to the blades, and a permanent magnet generator connected to the rotor, the permanent magnet generator generating electric power by rotating a rotator having a permanent magnet in accordance with the rotation of the rotor; auxiliary machinery and a wind turbine controller that control the wind turbine; a power converter that adjusts the electric power generated by the permanent magnet and supplies the adjusted electric power to the auxiliary machinery and to the wind turbine controller; a DC converter that is connected to the permanent magnet generator to convert AC power to DC power; and a control device that is connected to the DC converter to control the power converter by using the DC power obtained from conversion.

IPC 8 full level  
**F03D 9/00** (2016.01); **F03D 7/04** (2006.01)

CPC (source: EP US)  
**F03D 9/25** (2016.05 - EP US); **F03D 80/82** (2016.05 - US); **H02J 3/381** (2013.01 - EP US); **H02P 9/006** (2013.01 - US); **H02P 9/102** (2013.01 - EP US); **H02P 9/105** (2013.01 - EP US); **F05B 2220/7068** (2013.01 - EP US); **F05B 2260/76** (2013.01 - EP US); **H02J 2300/28** (2020.01 - EP US); **Y02E 10/72** (2013.01 - EP US); **Y02E 10/76** (2013.01 - EP US)

Cited by  
RU2743307C1; EP3672061A4; US11190019B2; US11764585B2; WO2019063835A1; US11817813B2

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 2806159 A1 20141126**; **EP 2806159 A4 20160608**; CA 2860009 A1 20130725; CN 104040171 A 20140910; JP 5836401 B2 20151224; JP WO2013108288 A1 20150511; TW 201350675 A 20131216; US 2015001848 A1 20150101; WO 2013108288 A1 20130725

DOCDB simple family (application)  
**EP 12866000 A 20120118**; CA 2860009 A 20120118; CN 201280066254 A 20120118; JP 2012000248 W 20120118; JP 2013554067 A 20120118; TW 102100543 A 20130108; US 201214372949 A 20120118